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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/741,308	12/19/2003	Amro Albanna	QMOT.003A	4355

20995 7590 04/19/2006

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EXAMINER	
BROCKETTI, JULIE K	

ART UNIT	PAPER NUMBER
3713	

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/741,308	ALBANNA ET AL.	
	Examiner	Art Unit	
	Julie K. Brocketti	3713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 November 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-67* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-67* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawing informalities noted in the paper mailed on June 23, 2005, must be corrected. Correction can only be effected in the manner set forth in the above noted paper.

Specification

The disclosure is objected to because of the following informalities: in paragraph [0035], Applicant changed "a material" to "an material". Proper grammar is "a material".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5-10, 15-17, 36-38, 43-48, 51, 53-58, 60, 61 and 63-67 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsuyama et al., U.S. Patent No. 6,767,282 B2. Matsuyama discloses a system and method for use with a computer application configured to respond to first input device data from a first input device. The first input device has a first format (See Matsuyama Figs. 1, 2; col. 10 lines 9-15). For example the first input device are the buttons on the gaming machine and have a digital format. A second input device, different than the first input device includes one or more sensors configured to measure movement of an object in one or more directions and creates second input device data representative of the movement of the object. The second input device data has a second format different than the first format (See Matsuyama Figs. 1, 3, 4; col. 10 lines 15-50). A processor is configured to convert the second input device data into simulated first input device data. The simulated first input device data has the first format, the processor is further configured to provide the simulated first input device data to the computer application, thereby simulating the first input device with the second input device (See Matsuyama col. 45-50) [claims 1, 20, 36, 46, 56, 65]. For example, the golf club input device data is analog and has to be converted to digital data. The computer application is a video game (See Matsuyama abstract) [claims 5, 23, 41, 51, 67]. The first input device is one of the following devices: a mouse, a joystick, or a keyboard, and the fist input device is mouse controller input data, joystick controller input data, or keyboard

input data (See Matsuyama Fig. 2; col. 10 lines 9-15) [claims 6, 66]. The object is a golf club and the second input device is attached to the golf club (See Matsuyama Fig. 2; col. 11 lines 53-67) [claims 7, 25, 43, 53, 60]. The object can also be a system user's arm and the second input device is attached to the system user's arm (See Matsuyama Fig. 2) [claims 8, 26]. For example, the player holds the club with his hand, which is attached to his arm. The one or more sensors are accelerometers and are configured to measure the acceleration and angle of the object in one or more directions and the second input device data is representative of the acceleration and angle of the object (See Matsuyama Fig. 1; col. 3 lines 51-61) [claims 9, 27, 37]. The acceleration of the object is measured directly from the one or more accelerometers and the angle of the object is computed by the sensor firmware (See Matsuyama col. 2 lines 20-23) [claims 10, 28, 38, 47, 48, 58]. Driver software is configured to convert the second input device data into simulated first input device data (See Matsuyama Fig. 1; col. 10 lines 45-50) [claim 15]. The one or more sensors indicate multiple potential positions and directions of the object at a given time and the processor determines in which of the multiple potential positions and directions the object is located (See Matsuyama Figs. 6 & 7; col. 10 lines 15-50) [claim 16, 33, 44, 47, 54, 63]. The object is a golf club and the multiple potential positions include potential locations of the golf club in multiple quadrants of 90 degrees (See Matsuyama Figs. 6 & 7; col. 10 lines 15-50) [claims 17, 34, 45, 55, 65]. Measuring the acceleration angle of the object in

one or more directions includes creating an electronic signal representative of the acceleration and angle of the object (See Matsuyama col. 10 lines 15-50) [claim 58]. Data is received from the computer application (See Matsuyama Fig. 13) [claim 61]. A computer readable medium comprises code to configure a processor to perform the aforementioned limitations (See Matsuyama col. 9 lines 44-50) [claim 66].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 42, 52 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuyama. Matsuyama lacks in specifically disclosing a mouse controller. It would have been obvious to one of ordinary skill in the art to have the first input device data be mouse controller input data where the mouse controller input data is not representative of the movement of the object and wherein the replicated first input device data is replicated mouse controller data representative of the movement of the object [claims 24, 42, 52, 62]. The use of a mouse as an input device in video games is common. Therefore one could have used a mouse in the invention of Matsuyama to substitute for the

buttons. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to use a mouse in the invention of Matsuyama because Applicant has not disclosed that a mouse provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Matsuyama's game and applicant's invention to perform equally well with buttons or a mouse because both mice and buttons are selection devices. Therefore, it would have been prima facie obvious to modify Matsuyama to obtain the invention specified because such a modification would have been considered a mere design consideration, which fails to patentably distinguish over the prior art of Matsuyama.

Claims 2-4, 11, 12, 20-30, 33 and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuyama in view of Woolston, U.S. Patent No. 6,162,123. Matsuyama discloses all of the limitations mentioned above. Matsuyama lacks in disclosing a transmitter or transceiver. Woolston discloses a wireless input device for a video game. The input device has a transmitter configured to communicate second input device data to a processor (See Woolston Fig. 10; col. 3 lines 55-67) [claims 2, 20]. The device also has a receiver configured to allow for two-way communication of data between the second input device and the processor (See Woolston col. 3 lines 55-67) [claims 3, 12, 21, 30]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a transceiver instead of a transmitter

and a separate receiver. Transceivers are well known throughout the art and provide dual roles as both a transmitter and receiver. Sensor firmware is configured to recognize that data is being sent from the processor to the second input device (See Woolston col. 2 lines 35-54) [claims 4, 22]. It would have been obvious to one of ordinary skill in the art to use a transceiver in the invention of Matsuyama. By having a wireless input device, the player is not restricted as much in their movement. Furthermore, data can be sent back to the input device so that the player feels tactile feedback, which provides a more realistic gaming experience. The second input device sends calibration data for the accelerometers to the processor to facilitate calculation of the angle of the object (See Matsuyama col. 11 lines 61-67; col. 12 lines 1-7) [claims 11, 12, 29, 30]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to send calibration data to the processor so that it can properly calculate the angle of the object. Without calibration data, the calculations would have no reference point and the calculated values would not accurately represent the movements of the input device.

Claims 13, 14, 31, 32, 39, 40, 49, 50 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuyama in view of Yasue et al., U.S. Patent No. 6,189,053 B1. Matsuyama lacks in disclosing assembling the data into data frames. Yasue et al. teaches of a processor configured to assemble data into data frames to communicate to the processor (See Yasue col. 6 lines 51-60) [claims 13, 31, 39]. It would have been obvious

to one of ordinary skill in the art at the time the invention was made to have a sensor processor configured to assemble the second input device data into data frames to communicate to the processor configured to convert the second input device data where each data frame includes acceleration and angle measurements for the object in Matsuyama [claims 14, 32, 40, 49, 50, 59]. The use of data frames to organize data is well known throughout the art. The data frames provide organization to the data and make it easier to use.

Claims 18 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuyama in view of Childs et al., U.S. Patent No. 5,623,545. Matsuyama lacks in disclosing dividing up the data into smaller portions. Childs et al. discloses software that is configured to receive a certain amount of data at a given time and the processor divides the data into multiple smaller portions to provide to the computer application (See Childs col. 3 lines 53-49) [claims 18, 35]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to divide the data into smaller portions before providing it to the computer application. Smaller portions of data are easier to use and dividing data into small portions is well known throughout the art.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuyama in view of Lum et al., U.S. Patent Application Publication No. 2004/0224763 A1. Matsuyama et al. lacks in disclosing the processor having two modes. Lum et al. teaches of a processor that has a first and a

second mode. In the first mode a first movement results in a first simulated input resulting in a first movement of a game character. In the second mode the first movement results in a second simulated input resulting in a second movement of the game character (See Lam ¶0007-¶0010) [claim 19]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the processor in Matsuyama have two modes for game character movement. By having two modes the processor can process data in two different formats, thereby, allowing controllers with different formats to be used to play the game machine. Consequently, a player can use the controller in which they prefer for game play.

Response to Arguments

Applicant's arguments filed November 25, 2005 have been fully considered but they are not persuasive.

Applicant argues that Matsuyama does not teach a second input device that is different from a first input device. Consequently, Applicant argues that Matsuyama neither teaches the second input device having a second data format, nor the concept of converting the second data format to the first format associated with the first input device. The Examiner disagrees. The first input device is item, 106, i.e. the buttons, which have a digital format. In Figure 2, item 200, i.e. grip with light sensors, is the second input device and it has an analog format, which is converted into digital signals, i.e. the same format as

the first input device (See col. 10 lines 45-50). The buttons, i.e. first input device can be used to control the game (See col. 1 lines 14-17); however, because pushing buttons is not realistic to playing golf, the second input operates as an analog control that collects data and converts the analog signals to digital so that the game system can understand the signals. Therefore, the second input device simulates the first input device for the game. Furthermore, as claimed in claim 56 the signals from the second input device are translated into first input device signals, i.e. digital. Furthermore, as recited in claim 65, a signal having a format incompatible with the computer application, i.e. analog, is translated into an input device data having a format that is compatible, i.e. digital.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. that the first input device is a dedicated device and the second input device is not a dedicated device) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie K. Brocketti whose telephone number is 571-272-4432. The examiner can normally be reached on M-Th 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on 571-272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Julie K Brocketti
Primary Examiner
Art Unit 3713